

Pipeline Programs	Educator Support
<u>GEAR UP Kentucky</u> . A \$40 million, six-year program to prepare low-income students for college (e.g, all students algebra-ready by 8th grade). Math/science focus ( <a href="http://cpe.ky.gov/policies/academicinit/GearUp/">http://cpe.ky.gov/policies/academicinit/GearUp/</a> )	Provides teacher PD to use EPAS assessments and design interventions/promote college for low income students.
<u>Project Lead the Way</u> . Supports 60+ middle and high schools creating a rigorous, lab-based pre-engineering curriculum. Thirteen districts are in the initial pilot. ( <a href="http://cpe.ky.gov">http://cpe.ky.gov</a> ; <a href="http://www.pltw.org">www.pltw.org</a> )	UK is a PTLW affiliate university working with all of postsecondary to provide PD for teachers, support for counselors in implementing the program.
<u>Kentucky Early Math Testing Program</u> . An online math assessment for early high school students with tutorials to improve college math readiness. ( <a href="http://www.mathclass.org">www.mathclass.org</a> )	Provides PD for teachers to use the test and develop interventions.
<u>Go Higher Kentucky Web Portal and KnowHowToGoKY.org Web site</u> . Everything a parent/student needs to know about how to prepare for, pay for, and apply to college. ( <a href="http://www.gohigherky.org">www.gohigherky.org</a> )	Includes a "counselor center" to assist counselors in tracking student progress and a "mentor" component to link students to mentors. Also linked to site where students complete their Individual Learning Plan.
<u>Kentucky Academy of Math and Science</u> . Located at Western Kentucky University, and early admissions program for high school students gifted in math and science to foster more college graduates in the STEM disciplines. ( <a href="http://www.wku.edu/academy">www.wku.edu/academy</a> )	
<u>ACT/EPAS in Kentucky</u> . State funded assessments to begin in middle school identifying student needs to be on track for college readiness in math, science, etc.	The Council on Postsecondary Education is working with P-12 on, and is funding efforts to, develop teacher PD models to support creation of accelerated learning options for students based on assessment results.
<u>Professional Science Masters</u> . The CPE is working with Kentucky universities, the Sloan Foundation, and the Council of Graduate Schools to create interdisciplinary programs in cooperation with industry to meet the demand for high level STEM professionals with expertise in STEM, business, and related areas. ( <a href="http://www.sciencemasters.com/">http://www.sciencemasters.com/</a> )	
<u>CPE STEM Task Force</u> . Produced recommendations to improve the STEM pipeline and promote STEM jobs in Kentucky. Work groups are now developing specific strategies and funding proposals to implement the recommendations. ( <a href="http://cpe.ky.gov">http://cpe.ky.gov</a> )	Includes proposals to attract more teachers in STEM fields and changes in teacher preparation and PD to improve education practice in STEM disciplines at the P-12 and postsecondary levels.

<p><u>Securing Kentucky's Future: CPE Developmental Education Task Force</u>. Produced six recommendations designed to reduce the number of students entering college underprepared and increase the success of students who are admitted as underprepared. Sets more realistic statewide college readiness standards. (<a href="http://cpe.ky.gov/committees/develop_ed">http://cpe.ky.gov/committees/develop_ed</a>)</p>	<p>Include proposals to revise criteria for accreditation of teacher preparation programs and improve teacher PD to enhance P-12 teachers' ability to help students reach college readiness benchmarks.</p>
<p><u>Kentucky Space Program</u>. An internationally-recognized program for college engineering students, allowing application of skills to develop and launch micro-satelites that can transmit programs to Kentucky schools. (<a href="http://www.kysat.com">www.kysat.com</a>)</p>	
<p><u>Academic Competitiveness and Smart Grants</u>. Federal grant program that provides significant additional financial aid to Pell-eligible students who complete new rigorous Kentucky high school requirements and major in STEM disciplines in college. Provided \$5 million in additional scholarships to low-income Kentucky students in its first year.</p>	
<p><u>KHEAA Teacher Scholarship Program and Best in Class Loan Forgiveness Program</u>. Provides significant scholarships and forgivable loans to low-income high potential students pursuing teaching at selected KCTCS and university programs. (<a href="http://www.khea.com">www.khea.com</a>; <a href="http://www.studentloanpeople.com">www.studentloanpeople.com</a>)</p>	
<p><u>Kentucky Principals' Academy</u>. CPE has awarded UK and UofL funding to jointly lead in development and launch of the Kentucky Principals' Academy in summer 2008. The academy will provide world-class leadership education to a cohort of current and aspiring principals competitively selected as Academy Fellows each year. (<a href="http://cpe.ky.gov">http://cpe.ky.gov</a>)</p>	
<p><u>Improving Educator Quality Grants</u>. The CPE allocates \$1 million in competitive grants each year to support scaleable PD models developed between postsecondary and P-12 faculty in critical subject areas, including STEM. (<a href="http://cpe.ky.gov">http://cpe.ky.gov</a>)</p>	
<p><u>Career Pathways Initiative</u>. Partnerships between the community college system and high schools, creating seamless transitions in targeted career areas (e.g., STEM related and health). New pathways to the baccalaureate degree are being created as well. (<a href="http://www.kctcs.edu">www.kctcs.edu</a>)</p>	

<p><u>Advance Kentucky</u>. Statewide effort to expand availability of AP Courses in math, science, and English supported by a \$13 million NIMSI grant. (<a href="http://www.kstc.com/?665">http://www.kstc.com/?665</a>)</p>	
<p><u>Appalachia Math Science Project</u>. The \$22 million National Science Foundation (NSF) Award helps strengthen and reform education in math and science in pre-K through grade 12 classrooms in participating districts in Kentucky, Tennessee and Virginia. The AMSP program seeks to demonstrate improved student achievement in mathematics and science through the support of partnerships that unite the efforts of teachers, administrators, guidance counselors and parents in local schools with administrators and faculty at area colleges and universities. AMSP's goals are to eliminate the achievement gap in science and mathematics in the Central Appalachian region and to build an integrated elementary, secondary and higher education system in this underserved region.</p>	
<p><u>KY Girls STEM Collaborative</u>. This project, funded by the National Science Foundation, offers the chance for schools and organizations committed to informing and motivating girls to pursue classes and careers in Science, Technology, Engineering, and Math (STEM) to come together to share best practices, develop new collaborations, and share resources. The successful career transition of students and the economic future of Kentucky are tied to increased participation of all students in careers that rely on STEM skills and competencies.</p>	
<p><u>KY Needs</u>. The mission of the NEED project is to promote an energy conscious and educated society by creating effective networks of students, educators, business, government and community leaders to design and deliver objective, multi-sided energy education programs. NEED's long-term partnership with the US Energy Information Administration provides the data and energy analysis used to update NEED curriculum materials on an annual basis.</p>	

KSU Enterprise Competition. The Kentucky Cabinet for Economic Development's Small Business Services Division will be a proud partner in Kentucky State University's third annual Youth Entrepreneurship Camp. During the expanded seven day camp, thirty high school students will be challenged to learn what it takes to be a successful entrepreneur. Participants will create a business plan, develop marketing and advertising strategies, and learn about financing a business. Each team will develop and produce a commercial touting their product or service. On the final day of camp, the teams will present their plans and commercials to a panel of judges that includes representatives from local Chambers of Commerce and the small business community. An award will be presented for the best team plan and presentation, and the campers themselves will select an Outstanding Youth Entrepreneur. Each young entrepreneur will receive special gifts and prizes provided by the camp's sponsors.

Kentucky Center for Performance Excellence (KCPE). KCPE is a non-profit agency promoting quality across the Commonwealth. Many of the same group of industry leaders are not familiar with the Baldrige National Quality Program established by Public Law during the Reagan Administration. The U.S. Department of Commerce oversees the public/private partnership to encourage American enterprise to become more competitive with foreign competition through the use of quality. Baldrige is the ONLY QUALITY award presented by the President of the United States.


## Kentucky STEM Initiatives

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